ASCII Text File Newline Conversion Procedure

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Some sites have reported problems either compiling the ASCII text database or running the CRS application after running ADD_SPA as part of the Build 6.0 upgrade. These problems are caused by a bad ASCII text data file.

The cause of the corruption is that UNIX expects line feed characters (LF) as the 'newline' character. Edited ASCII database files sometimes are transferred from a DOS or Windows computer as a binary file. Because of this the file may be transferred with embedded Carriage Return/LF (CR/LF) pairs instead of newline characters. The embedded CR/LF pairs cause ADD_SPA to corrupt the ASCII text file.

A site can check the suspected ASCII text file for embedded CR/LF pairs by executing the following command:

$od -t c FILENAME.ASC | more

Example:

```
0MP{admin} od -t c BAD.ASC | more
0000000  #   A   S   C   I   I       D   a   t   a   b   a   s   e
0000020  f   i   l   e      \r  \n   :   B   L   O   C   K       1   :
0000040  \r  \n   #   -   -   -   -   -   -   -   -       D   i   c   t
```

Embedded CR/LF characters will be displayed as “\r”, while newline characters will be displayed as “\n” characters. You should **not** see “\r” characters in the file. Note the highlighted **“\r”** characters in the preceding example.

CRLF2LF is a filter program that will search an 'ASCII' file and convert CR/LF pairs to Unix newlines.

1. Download and save the ‘*crlf2lf.c*’ file to a DOS floppy.
2. Log onto the CRS system as user ‘*admin*’.
3. Open a Unix Shell window.
4. Log on as user ‘*crs*’:

$su crs

5. Enter the password when prompted.
6. Copy the ‘*crlf2lf.c*’ file to the 0MP Main Processor using a ‘*doscp*’ command:

$doscp a:CRLF2LF.C /crs/data/SS/crlf2lf.c

7. Change to the ASCII file directory:

$cd /crs/data/SS

8. Compile the C program and make it executable:

$cc crlf2lf.c -o crlf2lf [Note this creates the executable: crlf2lf]
$chmod 755 crlf2lf

9. Backup your current ASCII file:

$cp -p <CURRENT>.ASC <CURRENT>.ASC.SAVED

10. Run the program to filter the file:

$./crlf2lf <CURRENT>.ASC
[Note this creates the file: <CURRENT>.cln]

11. Examine the .cln file after the conversion. Verify that "\r" characters are not embedded in the file. See the following example.

Example:

```
0MP{admin} od -t c BAD.cln | more
0000000  #   A   S   C   I   I       D   a   t   a   b   a   s   e
0000020  f   i   l   e     \n   :   B   L   O   C   K       1   :  \n
0000040  #   -   -   -   -   -   -   -   -       D   i   c   t   i   o
```

12. Rename the corrected file to the .ASC extension:

$mv <CURRENT>.cln <NEW_NAME>.ASC

13. Exit from the "crs" shell session.
14. Exit from the "admin" shell session.
15. Rerun the 'XCRS_SITE' program on the fixed file.